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Water Supply Outlook For Utah



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

UTAH STATE DEPARTMENT of NATURAL RESOURCES
-- DIVISION of WATER RIGHTS

AS OF
OCT. 1, 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: VIEW OF A SNOTEL DATA SITE IN THE SNOWY RANGE IN WYOMING. TALL CYLINDRICAL DEVICE IS A PRECIPITATION GAGE. SNOW PILLOWS ON THE GROUND NOT VISIBLE DUE TO SNOW COVER. SHELTER HOUSE, ANTENNA TOWER, ANTENNA, AND TEMPERATURE UNIT ARE VISIBLE BEHIND THE PRECIPITATION GAGE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR UTAH

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WATER SUPPLY OUTLOOK

SUMMARY

as of

October 1, 1979

* Utah's 1979 water supply ranged from "below *
* average" for some water users in Uintah *
* Basin to "above average" for most water *
* users in southern Utah. A very dry summer *
* caused less streamflow than expected in *
* the northern 2/3 of the state. Reservoir *
* storage is near average statewide, but some *
* are only about 1/2 average. Fall soil *
* moisture is very dry. *

A very dry summer resulted in less May-July streamflow than was forecast on the 1st of May. Provisional flow measured by the U.S. Geological Survey indicates flow in Northern Utah were 10 to 35% less than forecast while those in southern Utah were generally higher than the flows forecast. The extremes were 32% of average on Chalk Creek near Coalville and almost 10 times average for the inflow to Minersville Reservoir on the lower Beaver River.

Reports indicate that some secondary water rights in Uintah Basin received reduced water supplies by about mid season and will have below average carry over. Water users in southern Utah had an abundant water supply and have good reservoir carry over this fall.

Summer precipitation at mountain stations ranged from 4 to 80% of average and watershed soils are very dry. Several good rains are needed before snow falls to prime these soils to make them ready to assist next springs runoff.

The following table is a comparison of forecasts made on May 1st with provisional flow measured by the Geological Survey.

WATER SUPPLY OUTLOOK

<u>Station</u>	<u>Forecast Period</u>	<u>May 1 Forecast (1000 A. F.)</u>	<u>Measured Flow for the Period (1000 A. F.)</u>
<u>BEAR RIVER</u>			
Bear nr Ut-Wyo. State Line	May-July	90	82.1
Bear nr Woodruff	May-July	100	52.2
Bear nr Randolph	May-July	62	25.9
Logan nr Logan (combined)	May-July	96	81.1
Little Bear nr Paradise	May-June	25	18.8
Blacksmith Fk nr Hyrum	May-July	35	29.5
<u>WEBER-OGDEN RIVERS</u>			
Farmington nr Farmington	May-July	7.0	6.1
Chalk Creek at Coalville	May-June	16.5	10.7
East Cyn. Creek nr Morgan	May-June	15.4	11.4
Lost Creek nr Croydon	May-June	15.0	10.9
Pineview Reservoir Inflow	May-June	82	74.7
South Fk Ogden nr Huntsville	May-June	45	41.9
Weber nr Oakley	May-June	78	76.2
American Fk nr American Fk	May-July	29	
Provo nr Hailstone	May-July	90	
<u>JORDAN RIVER AND SALT LAKE</u>			
Big Cottonwood nr Salt Lake	May-July	34	
Parley's Creek nr Salt Lake	May-July	10.9	
<u>DUCHESNE RIVER</u>			
Ashley nr Vernal	May-July	60	37.8
Flaming Gorge Inflow	Apr-July	1,200	781
Lakefork below Moon Lake	May-July	72	52.1
Uinta nr Neola	May-July	88	56.5
Whiterocks nr Whiterock	May-July	60	41.6
Yellowstone nr Altonah	May-July	66	45.6
<u>MUDDY CREEK</u>			
Muddy Creek nr Emery	May-July	21	19.0
<u>SAN RAFAEL RIVER</u>			
Cottonwood Cr nr Orangeville	May-July		38.3
Ferron Creek nr Ferron	May-July	44	34.3

WATER SUPPLY OUTLOOK (continued)

<u>Station</u>	<u>Forecast Period</u>	<u>May 1 Forecast (1000 A. F.)</u>	<u>Measured Flow for the Period (1000 A. F.)</u>
<u>UPPER COLORADO BASIN</u>			
Colorado nr Cisco, Utah	Apr-July	4,300	4,940
Green at Green River, Utah	Apr-July	3,500	2,986
Lake Powell Inflow	Apr-July	10,800	10,845
Mill Creek near Moab	May-July	7.2	6.2
<u>SEVIER RIVER</u>			
East Fork Sevier nr Kingston	May-July	30	44
Sevier nr Hatch	May-July	82	71
Sevier nr Kingston	May-July	52	64
Chicken Cr nr Levan	May-July	2.8	7.4
<u>BEAVER RIVER</u>			
Beaver nr Beaver	May-July	31	48.6
Minersville Inflow	May-July	16	52.0

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH **OCTOBER 1, 1979**

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
<u>Bear River</u>	Bear Lake	1421.0	956.9	959.7	1091.1
	Woodruff Narrows	26.5	5.0e	14.5	12.0
<u>Beaver River</u>	Minersville (RkyFd)	23.3	10.1	5.5	5.2
<u>Little Bear</u>	Hyrum	15.3	5.9	7.1	8.7
	Porcupine	11.3	1.0	1.1	2.2
<u>Ogden</u>	Causey	6.9	1.1	1.9	1.6b
	Pineview	110.1	58.2	70.5	57.7
<u>Provo</u>	Deer Creek	149.7	80.4	--	100.9
<u>Settlement Creek</u>	Settlement Creek	1.2	0.0	0.4	--
	Vernon Creek	0.6	0.1	0.1	--
<u>Sevier River</u>	Gunnison	18.2	0.1	3.7	3.6
	Otter Creek	52.5	35.0	8.3	18.7
	Piute	71.8	20.2	0.0e	13.4
	Sevier Bridge	236.0	65.0	23.2	66.3
<u>Spanish Fork</u>	Strawberry	270.0	149.2	150.2	149.0
<u>Utah Lake</u>	Utah Lake	883.9	584.7	628.3	569.8
<u>Weber</u>	East Canyon	48.1	25.0	31.1	25.3
	Echo	73.9	10.2	34.4	27.6
	Lost Creek	20.0	12.8	14.6	13.8b
	Rockport	60.9	43.7	51.9	44.4
	Willard Bay	193.3	165.1	165.2	145.9
<u>Ashley Creek</u>	Steinaker	33.3	10.1	--	16.4
<u>Colorado</u>	Blue Mesa	829.5	710.0	727.8	
	Lake Powell	25002.0	21637.0	16563.0	
<u>Green</u>	Flaming Gorge	3749.0	2572.0	2825.1	
<u>Lakefork</u>	Moon Lake	35.8		2.2	10.6
<u>Price River</u>	Scofield	65.8	41.2	39.4	34.0
<u>San Juan</u>	Navajo	1696.0	1364.0	1237.0	
<u>San Rafael</u>	Huntington North	3.9	0.2	--	1.0b
	Joe's Valley	54.6	36.9	--	38.6b
	Mill Site	16.7	1.3	4.8	--
<u>Strawberry</u> <u>Uintah</u>	Starvation	165.3	2.2	--	123.6b
	Bottle Hollow	11.3		--	10.2b
	b=less than 15 yrs.				

UTAH PRECIPITATION DATA
1979 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
RUG LAKE									
HURTS-MILLER	12/30 3.41	* 1 50	2/28 .84	4/06 1.45	4/26 1.37		6/28 1.55	9/27 3.25	28.08
CLARKSTON MTN								9/19 3.25	13.37
FRANKLIN BASIN	12/30 12.60	1/31 8.50	2/28 5.20	3/31 3.30	4/30 3.10	5/31 3.30	6/30 1.00	9/25 28.27	
GARDEN CITY SMT	12/26 9.71	1/29 5.34	2/26 3.11	3/26 1.11	4/25 1.94	5/30 2.16	6/29 .58	9/26 1.90	38.90
GEORGE PEAK								* 1 60	25.35
GOLD HILL								9/08 25.69	
HAYDEN FORK	* 8 22	* 3 62	2/28 4.29	4/06 3.80	4/26 1.50	5/30 2.20	6/28 25.69	9/20 .84	26.53
HERD HOLLOW								9/20 3.01	27.05
LILY LAKE								9/26 23.07	
LITTLE BEAR UP	12/31 10.10	1/31 3.70	2/28 4.80	3/31 3.50	4/30 1.30	5/31 2.20	6/28 17.86	9/19 2.54	20.40
KLONDIKE NRWS	12/26 6.82	1/29 4.83	2/26 3.56	4/05 2.78	4/25 1.04	5/30 2.74	6/26 1.60	9/28 2.20	29.40
MONTA CRISTO	12/27 8.88	1/30 6.35	* 4 00	3/26 6.30	4/25 4.80	5/29 3.92	6/29 1.23	9/26 1.65	24.65
SALT RIVER SMT	12/29 6.62	1/30 4.13	2/27 3.56	3/29 1.57	4/27 2.43	5/31 1.19	6/28 .93	10/03 2.66	37.99
STILLWATER CMP	* 4 86	* 2 10	2/28 1.82	4/06 2.07	4/26 1.25		6/28 1.90	8/31 1.59	22.02
TONY GROVE LK	12/31 17.60	1/31 6.70	2/28 4.70	3/31 4.90	4/30 3.10	5/31 2.50	6/30 1.20	9/19 2.23	16.23
TONY GROVE RS	12/26 7.69	1/29 5.07	2/26 4.04	4/05 2.34	4/25 .48	5/30 1.95	6/29 .73	9/26 1.36	23.66
WILLOW FLAT	12/26 8.18	1/29 5.08	2/26 4.71	4/05 3.64	4/25 1.38	6/01 2.65	6/29 1.26	9/27 1.65	29.55

WEVER - OGDEN RIVER BASINS

BEN LOMOND TRL	12/27 11.67	1/30 7.01	2/27 6.74	3/26 2.74	4/25 2.68	5/29 3.34	6/29 2.08	10/03 4.14	40.40
BEN LOMOND PK	12/31 20.30	1/31 10.50	2/28 4.70	3/31 13.00	4/30 1.80	5/31 3.20	6/30 3.30	9/28 4.70	53.50
CAUSEY DAM	12/27 6.37	1/30 3.95	2/27 2.08	3/26 1.05	4/25 1.61	5/29 1.53	6/29 .60	10/03 .83	18.02
CHALK CREEK 1	12/31 7.00	1/31 4.30	2/28 4.90	3/31 2.60	* 3 50	* 1 40	6/25 .33	9/25 3.20	27.23
CHALK CREEK 2	12/31 5.10	1/31 2.30	2/28 2.30	3/31 2.40	4/30 2.80	5/31 1.30	6/25 .30	9/25 2.85	18.16
CHALK CREEK 3	1/02 4.40	1/30 1.94	2/28 1.80	4/06 2.28	4/26 1.83	5/25 1.15	6/25 .28	9/25 2.64	16.32
DRY BEAD POND	12/27 12.12	1/30 4.63	2/27 3.37	3/26 1.76	4/25 3.24	5/29 2.44	6/29 .90	10/03 20 7	30.53
FARMINGTON GS	12/27 8.32	1/30 6.16	2/27 4.12	3/26 3.51	4/25 4.94	* 1 80	*		
FARMINGTON LWP	12/27 11.21	1/30 5.98	2/27 5.98	3/26 3.49	4/25 3.88	* 1 00	6/29 4.61		
FRANCIS CANYON								10/11 18.32	
GULFERS PEAK								10/11 27.16	
HORSE RIDGE	12/27 10.87	1/30 6.92	2/27 4.12	3/26 2.00	4/25 3.86	* 2 50	7/02 3.72	10/02 1.80	35.79
LOST CREEK	12/27 5.13	1/30 3.45	2/27 1.96	3/26 .63	4/25 1.23		7/02 3.67	10/02 1.50	17.57
PARLEY CYN SMT	12/28 8.49	1/29 3.90	2/27 4.90	3/29 1.57	4/30 4.54	5/31 1.35	7/03 .23	9/14 2.07	27.05
PINE CANYON								8/11 21.19	
PORCUPINE								9/25 18.26	
REDDEN MINE UP				4/09 19.80			6/25 15.96	9/25 2.30	26.19
SAGEBRUSH FLAT	12/27 6.53	1/30 4.02	2/27 2.18	3/26 1.06	4/25 1.97	5/29 1.82	6/25 4.70	9/26 1.69	19.46
SERGEANT LAKES							6/29 .62	10/03 1.26	25.26
SHINGL MTL FLT							6/25 20.17	9/25 5.09	29.52
							6/26 25.57	9/26 3.95	

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE (EXCEPT AS NOTED *)
*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST

U T A H P R E C I P I T A T I O N D A T A

1979 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
SM+MOREHOUSE	1/02 6.02	1/30 3.10	2/28 3.05	4/06 2.85	4/26 1.80	5/25 1.17	6/26 .32	* 3 16	21.47
U T A H L A K E - J O R D A N R I V E R B A S I N									
BEAVER DIVIDE	12/30 6.60	1/31 4.20	2/28 3.40	3/31 1.20	4/30 2.00	5/31 2.00	6/30 .20	9/20 1.50	21.10
CLEAR CR RUG 2	12/30 8.80	2/03 3.62	2/28 2.80	4/05 2.85	4/25 1.95	5/29 1.70	6/28 .25	9/27 1.85	23.82
DAHIEL-STR SMT	12/30 9.96	2/05 4.65	2/24 3.15	4/05 3.34	4/24 1.30	5/24 1.15	6/26 .40	9/27 1.55	25.48
DESERET PEAK	12/30 6.70	1/29 6.20	2/27 5.35	3/31 3.85	4/27 1.50	5/29 1.60	* 20	* 2 92	37.98
DUTCHMAN RS	12/30 10.03	1/30 4.33	2/27 3.25	3/29 2.27	4/30 1.88	6/01 1.49	7/01 .24	* 10/01	28.32
EAST PORTAL	12/30 10.35		3/01 5.35	4/05 3.00	4/24 1.30	5/29 1.60	6/26 .05	9/27 1.65	24.80
HOBHLE CK SMT							6/26 24.89	9/24 2.27	23.30
LAKE CREEK	12/28 7.03	1/29 3.35	* 4 80	3/29 1.57	4/30 3.30	5/29 1.18	6/27 .56	9/17 5.41	27.16
LAMBS CANYON 2	12/28 8.60	1/26 2.80	2/27 3.01	4/30 4.50	4/28 3.20	5/31 2.30	6/27 .00	9/28 2.57	24.64
MIDDLE CANYON	12/30 8.95	2/03 4.80	3/01 3.80	4/04 4.30	4/25 2.20	5/30 1.75	6/29 .00	9/28 2.15	27.15
PAYSON RS				3/28 21.91	4/25 6.83	7/12 1.50	7/12 1.50	9/14 1.15	27.95
ROCKY BASIN-SC	12/30 12.30	1/31 5.57	3/01 5.75	4/01 4.22	5/01 1.72	6/01 1.02	7/01 .13	10/01 2.82	31.39
SILVER LK BRTN	1/04 6.85	2/03 3.86	2/27 2.26	4/09 2.22	4/24 .95	5/25 1.23	6/27 .72	9/20 3.02	53.53
SOAPSTONE RS	10/1 15.10	1/29 5.20	2/26 5.85	3/31 4.30	4/26 1.00	5/29 1.80	7/01 .25	10/01 3.80	21.11
TIMPANOGOS DIV	1/04 11.21	2/03 5.65	2/27 4.66	* 3 25	* 1 89	5/25 1.68	6/27 1.13	9/20 3.95	37.30
TRIAL LAKE	12/28 8.90	1/27 3.90	2/28 2.70	3/26 3.50	4/27 2.00	5/31 2.45	6/27 .85	9/28 1.90	33.42
VERNON CREEK									26.20
D U C H E S N E - G R E E N R I V E R B A S I N									
ASHLEY TWIN LK	* 3 04	1/30 3.29	2/28 1.53		4/26 2.94	6/27 2.65	9/18 25.50	9/18	30.40
ATWOOD LAKE	12/31 8.30	1/31 3.90	2/28 3.90	3/31 3.80	4/30 1.00	5/31 2.00	6/27 .40	6/27	15.98
BLACKS FK JCF							6/27 20.04	9/19 2.53	26.50
BROWN DUCK RDG	12/28 5.40	1/31 1.02	3/01 .80	3/27 1.40	5/02 3.50	5/31 1.95	6/27 2.75	9/19 2.75	22.79
BUCK PASTURE								9/19 2.95	17.02
BURNT CREEK	12/30 8.30	* 2 57	* 4 00	4/05 2.85	4/24 .50	5/24 .87	6/26 .33	9/24 24.83	20.82
CHEPETA WTRCK	* 2 88	* 3 48	2/28 1.76	* 2 30	* 1 24	6/27 3.35	6/27 3.35	9/19 2.51	17.52
CURRENT CREEK	12/28 7.32	1/31 1.85	3/01 2.78	3/27 2.30	5/02 4.35	5/30 1.75	6/25 29.71	8/25 23.40	29.71
E FK BLACKS FK								9/19 5.05	23.40
FIVE POINT LK	* 3 43	* 3 70	2/28 5.91	* 2 41	4/26 4.16	5/31 2.35	6/27 3.75	9/19 4.50	21.00
GRIZZLY RIDGE								9/22 4.07	16.92
HENRYS FORK								9/24 25.65	20.30
HICKERSON PARK	12/30 10.27	2/05 3.19	2/26 2.25	3/19 1.55	4/25 4.62	6/19 2.59	9/28 5.61		28.08
HEWINTA GS									
HIGHLINE TRAIL									
INDIAN CANYON									

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE(EXCEPT AS NOTED *)

*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST

UTAH PRECIPITATION DATA
1979 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
JACKSON PARK		2/02 10.62	2/27 2.43		4/24 5.80			9/18 6.67	25.52
KIDNEY LAKES								9/19 26.19	26.19
KINGS CABIN UP	12/31 6.10	1/31 1.90	2/28 1.70	3/31 3.20	4/30 1.80	5/31 2.30	6/30 .00	9/30 2.80	19.80
LAKEFORK BASIN								8/23 34.40	34.40
LAKEFORK MOUNTAIN	12/31 6.40	1/31 2.80	2/28 2.80	3/31 2.80	4/30 1.30	5/31 1.80	6/30 .60	9/18 2.10	20.60
LIGHTNING LAKE								8/22 37.75	37.75
MCCOY PARK								9/24 20.10	20.10
MOSBY MOUNTAIN	* 7.97	* 1.60	2/27 2.65	4/06 5.08	4/24 .93	* 2.40	6/30 .60	9/24 6.00	26.63
PARADISE PARK	* 10.89	* 1.67	2/27 2.89	* 5.00	* 2.33			9/24 4.05	26.83
REYNOLDS PARK								9/24 26.33	26.33
ROCK CREEK	1/05 6.31	2/02 2.92	2/27 1.92	4/09 2.71	4/24 .00	5/24 1.74	6/21 .02	9/28 2.90	18.52
SHADOW LAKE								9/13 32.88	32.88
SPIRIT LAKE		1/30 9.64	2/28 2.26		4/26 6.18			9/19 7.85	25.93
STEEL CRK PARK	12/30 5.30	1/26 2.80	2/28 2.40	3/31 2.40	4/30 3.30	5/31 3.40	6/27 1.40	9/29 3.00	24.00
TROUT CREEK	11/01 .45	1/30 7.97	2/28 2.19	* 3.62	* 1.00			9/18 3.40	18.63
WINDY PARK								9/18 21.90	21.90
W FK DUCHESNE							6/26 25.38	9/24 2.35	27.73

P R I C E - S A N R A F A E L R I V E R B A S I N

BLACKS FLAT-UM	12/28 7.88	1/30 4.20	2/26 2.10	3/26 .90	4/30 3.19	5/30 3.98	6/28 2.85	* 2.72	13.95
BUCKHORN FLAT	12/27 15.20	1/29 6.25	2/26 3.24	3/30 6.40	4/25 1.47	5/30 1.82	7/02 1.92	10/12 40.28	40.28
BUCK FLAT	12/27 8.80	2/03 6.65	2/28 2.90	4/05 4.40	4/25 1.70	5/31 2.40	6/26 .55	9/25 2.45	29.85
CAMP JACKSON	12/27 15.00	* 2/03 6.68	2/26 3.83	3/30 7.05	4/25 1.25	5/30 3.70	7/02 1.05	10/12 41.40	41.40
DILLS CAMP	12/28 7.33	2/03 1.50	4/05 4.30	4/25 1.10	5/31 1.50	7/02 1.20	9/25 5.55	10/16 31.99	26.46
LASAL MTN UP	12/28 8.24	1/30 5.20	2/28 3.30	3/31 4.80	4/26 3.60	5/31 3.49	6/28 .30	* 2.22	15.62
FISH LAKE	12/28 6.80	2/02 2.30	2/26 1.90	3/26 .80	4/30 1.70	5/31 2.45	6/28 .17	9/25 3.68	30.54
GOOSEBERRY RES	12/26 9.49	1/30 5.85	2/26 4.10	4/02 5.15	4/26 1.70	5/30 2.05	6/29 .05	9/26 2.25	15.85
MUD CREEK	* 6.70	1/30 4.00	2/28 3.10	4/03 4.25	4/26 .00	5/29 1.30	6/27 2.80	9/26 2.55	29.95
ORANGE OLSEN	12/29 5.35	1/30 2.50	2/28 1.90	3/28 5.10	4/25 1.90	5/31 1.70	6/28 .20	9/26 3.50	20.18
RED PINE RIDGE	12/26 3.30	1/30 4.80	2/28 3.50	4/04 2.65	4/27 .30	5/30 1.60	6/29 .21	9/27 2.04	23.83
STUARTS OLD	12/26 6.40	1/30 3.63	2/28 2.00	4/04 2.80	4/25 .90	5/30 1.60	6/29 .21	9/27 2.04	23.83
WHITE RIVER #1	12/30 8.83		3/01 7.45	4/05 2.80	4/25 .90	5/30 1.60	6/29 .21	9/27 2.04	23.83

S E V I E R - M E A V E R R I V E R B A S I N S

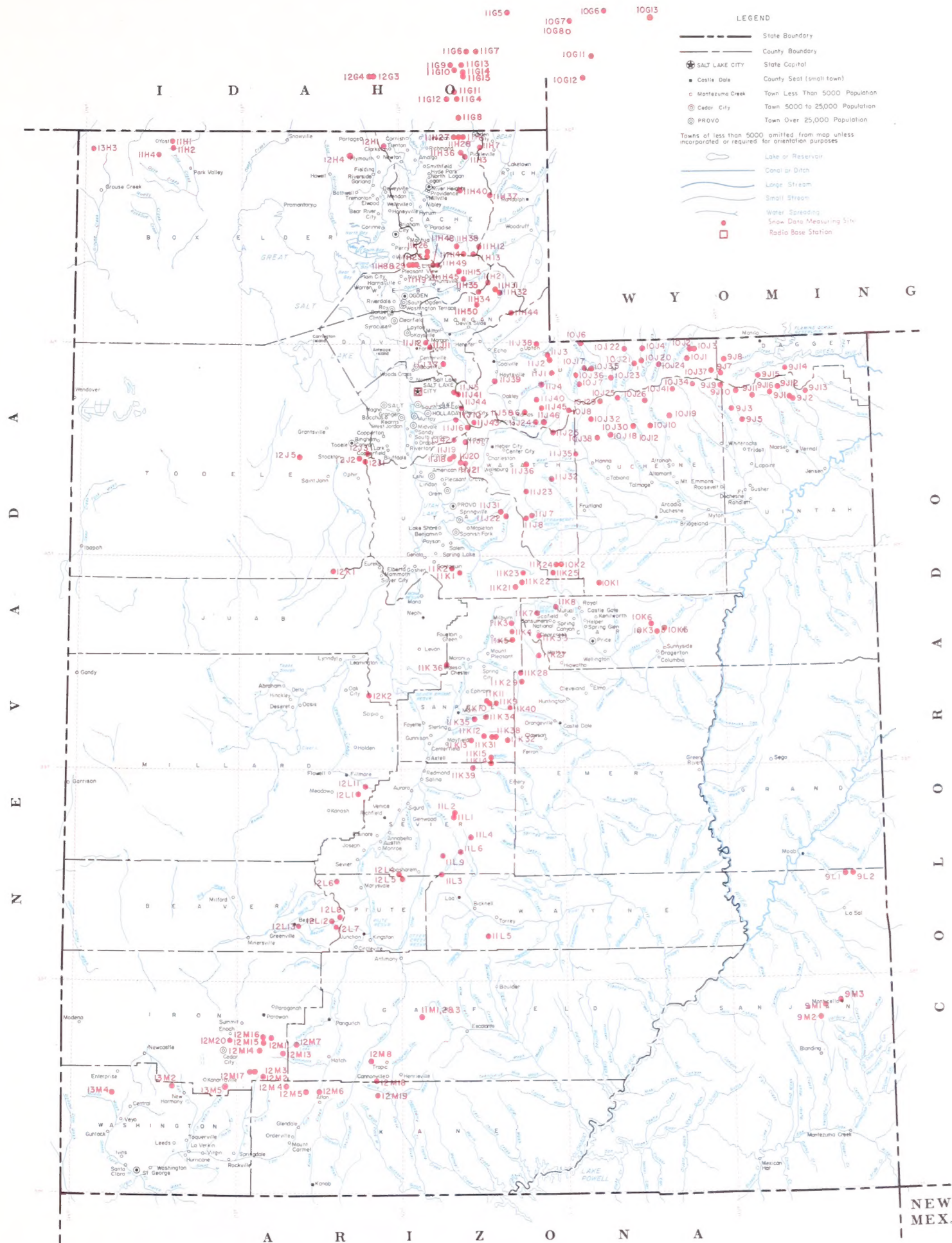
BEAVER DAMS	12/27 6.43	2/03 5.92	2/28 2.30	4/05 4.19	4/25 1.66	6/01 2.60	6/25 .12	9/26 3.20	26.42
BIG FLAT	12/26 9.69	1/30 5.60	2/26 5.80	3/26 2.50	4/30 5.90	5/31 2.90	6/18 .00	9/27 2.44	34.83
BOX CREEK	12/26 9.80	1/30 4.60	2/26 3.40	3/26 2.10	4/30 4.72	6/27 2.88	7/06 .00	* 2.25	27.75
CASTLE VALLEY	12/26 12.05	1/30 4.50	2/26 4.10	3/26 2.40	4/23 6.20	5/30 2.28	7/06 .00	9/28 2.25	33.78

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE (EXCEPT AS NOTED *)
*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST

UTAH PRECIPITATION DATA

1979 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
DUCK CREEK	1/02 13.60	2/05 7.00	3/02 5.70	4/03 5.20	4/26 3.30	5/30 2.00	6/26 3.88	9/26 3.88	57.68
FARMSWORTH LK	12/28 7.60	1/30 4.70	2/26 3.50	3/26 2.10	4/30 6.01	6/26 3.96	* 22	* 22	28.09
GRRC HEADQTRS	12/26 3.15	1/30 4.15	2/28 4.30	4/04 5.20	4/25 2.90	6/01 3.10	7/01 2.90	10/01 2.90	50.72
GRRC MAJORS	12/26 4.60	1/30 2.50	2/28 1.85	4/01 2.90	4/25 2.00	6/01 2.05	7/01 1.99	10/01 1.99	17.94
GRRC MEADOWS	12/26 9.37	1/30 5.40	2/28 5.20	4/04 7.90	4/25 2.30	6/01 2.30	7/02 4.34	10/01 4.34	36.51
GRRC OAKS	12/26 5.50	1/30 3.05	2/28 2.30	4/01 4.00	4/25 2.30	6/01 2.30	7/01 2.55	10/01 2.55	22.00
GOUSEBERRY RS	12/28 6.85	1/30 3.40	2/26 1.80	3/26 1.60	4/30 4.60	6/01 3.15	6/26 1.15	9/28 1.15	21.79
HI-TOP MTN								* 17.96	
KIMBERLY MINE	12/26 9.28	1/30 5.20	2/26 5.20	3/26 2.70	4/30 6.12	5/29 4.23	6/26 2.17	9/28 2.17	55.06
M A M M D T H	1 2 2 6 1 0 7 0 1 3 1	5 2 0 2 2 8	6 3 0 3 3 1	2 6 0 4 3 0	1 6 0 5 3 0	3			
MERCHANT VALLEY	12/26 7.17	1/30 4.30	2/26 5.10	3/26 2.40	4/30 5.96	5/29 2.66	6/18 3.13	9/27 3.13	50.72
MIDWAY VALLEY	1/22 16.30	2/05 6.20	3/03 7.10	4/03 10.00	* 75	5/30 1.50	6/29 4.25	9/26 4.25	
MT BALDY RS	12/27 9.10	2/03 7.50	2/28 2.90	* 8.80	4/25 1.50	6/25 2.83	9/26 4.30	9/26 4.30	36.93
OAK CREEK	1/03 8.71	1/30 3.75	2/28 4.35	3/26 1.40	4/23 2.95	5/30 7.46	9/27 4.16	9/27 4.16	28.43
PANGUITCH LAKE	12/27 8.10	1/30 1.90	2/26 2.50	3/26 5.10	4/30 3.90	5/30 1.27	7/06 19.8	9/28 19.8	20.45
PICKLE KEG SPG	12/31 9.00	1/31 5.80	2/28 3.70	3/31 1.70	4/30 8.11	5/31 2.80	6/30 2.60	9/26 2.60	32.90
PINE CREEK	12/26 9.21	1/30 4.50	3/01 4.50	4/25 4.25	5/30 1.60	6/28 1.60	9/25 2.65	* 2.65	21.86
REES FLAT	1/03 6.70	1/30 2.65	2/28 2.65	4/27 7.25	5/30 2.95	6/28 2.95	9/28 2.02	9/28 2.02	24.22
SHINGLE MILL	12/28 11.35	1/30 2.70	3/02 5.50	4/04 4.75	4/23 1.60	7/06 2.55	9/24 3.52	9/24 3.52	31.99
WIDTSOE-ESCL 3									
C O A L C R E E K - V I R G I N - E S C A L A N T E R I V E R B A S I N S									
KULDS CRYSTAL	12/31 15.70	1/31 9.50	2/28 6.50	3/28 2.70	* 50	2 00	* 4 50	* 4 50	41.40
LITTLE GRASSY	1/03 10.90	2/05 5.40	3/03 3.00	4/05 6.65	4/27 25		9/27 2.40	9/27 2.40	28.60
LONG FLAT	1/03 10.35	2/05 3.80	3/03 2.70	4/05 3.80	4/30 78		9/ 6 4.47	9/ 6 4.47	25.90
TALL POLES	12/28 5.95	1/29 4.50	3/01 4.40	4/04 5.20	4/30 1.50	5/30 2.70	6/29 3.10	9/26 3.10	27.45
WEBSTER FLAT	1/03 16.48	2/05 7.10	3/03 7.60	4/03 8.90	* 40	1 91	* 4 07	* 4 07	34.63
YANKEE RESVR	12/26 6.25	1/30 5.05	2/26 3.15	3/26 1.90	4/30 3.88	5/30 2.72	6/29 2.30	9/26 2.30	25.35



SNOW COURSES AND RELATED DATA MEASURING SITES

UTAH

1978

20 0 20 40
SCALE 1:1,500,000
ALBERS EQUAL AREA PROJECTION

USGS National Atlas 1:1,000,000 Albers
Equal-Area projection (1987) used as source
for base map and adopted for SCS use.



INDEX TO UTAH, BEAR & UPPER COLORADO RIVER BASINS

GREAT BASIN DRAINAGE

GREAT BASIN DRAINAGE													
NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
UPPER BEAR RIVER (above Harer, Idaho)													
10G11	W	Upper Bear	7	27N	117W	8,700	11J25P	U	Sagehen R.S.	9	3S	8E	7,800
10G12	W	Burns-Miller Ranch	19	27N	117W	7,900	11J19	U	South Fork R.S.	24	4S	2E	6,100
10G13	W	CCC Camp x	9	27N	117W	7,500	11J18PST	U	Timpanogas Cave Camp	27	4S	2E	5,300
10G14	W	Gold Mine	25	27N	117W	9,400	11J18PST	U	Timpanogas Divide	33	4S	2E	8,600
10G15	W	Hayden Fork	25	27N	117W	9,400	10J8PST	U	Trial Lake	5	2S	9E	9,960
10G16	W	Kelly Ranger Station	13	26N	118W	8,200							
10G17	W	Lily Lake	34	26N	118W	8,200							
10G18	W	Monte Cristo R.S.	4	26N	118W	8,960							
10G19	W	Poison Meadows x	29	30N	116W	8,500							
10G20	W	Salt River Summit x	32	29N	118W	7,900							
10G21	W	Snyder Basin x	15	29N	115W	8,400							
10J17P	U	Stillwater Camp	32	2N	10E	8,550							
LOWER BEAR RIVER (below Harer, Idaho)													
11H37pST	U	Bug Lake	18	11N	41E	7,950	12J2	U	Bevan's Cabin	24	4S	4W	6,450
11G11	U	Christensen Ranch	27	13S	41E	5,600	12J3P	U	Deseret Peak	15	4S	7W	9,250
11H38p	U	Cinnamon Creek	5	8N	3E	7,300	12J1P	U	Lamb's Canyon #2	21	15	3W	7,500
12H1P	U	Clarkson Mountain	29	14N	2W	6,300	12J3P	U	Middle Canyon	8	4S	3W	7,000
11G12	U	Cub River Ranger Station	5	15S	41E	5,400	11J44	U	Mill Creek	25	15	2E	6,950
11G14	U	Dry Basin	30	13S	42E	7,900	11J45	U	Mill D South Fork	18	25	3E	7,400
12G4	U	Dry Creek Flat	31	13S	37E	7,350	12J1P	U	Rocky Basin Settlement Canyon	30	45	3W	8,900
11G5	U	Engelmann Summit	24	12S	42E	6,500	12J2P	U	Silver Lake (Brighton)	35	25	3E	8,725
11G6	U	Engelmann Canyon (mouth)	165	41E	6,000		12J3P	U	Snow Bird (Gad Valley)	18	35	3E	7,700
11G8PST	U	Garden City Summit	34 & 35	41E	6,000		12K1PST	U	Vernon Creek	21	105	5W	7,500
11H40P	U	Herd Hollow	31	11N	3E	7,200							
11G13	U	Horseshoe Basin	31	13S	42E	8,000							
11H1P	U	Klondike Narrows	10	14N	3E	7,400							
11G13	U	Liberty Springs	16	8N	1E	6,240							
11H26	U	Little Bear (lower)	22	8N	1E	6,000							
11H25PST	U	Little Bear (upper)	22	8N	1E	6,550							
12G3	U	Oxford Mountain	32	10S	37E	6,800							
11G5	U	Slug Creek Divide	15	10S	44E	7,225							
11H27	U	Steep Hollow #1	7	14N	3E	8,500							
11H28	U	Steep Hollow #2	9	13S	3E	7,700							
11G10	U	Strawberry Creek	9	13S	41E	5,800							
11H36PST	U	Timpanogas Divide	14	13S	41E	6,800							
11H37	U	Timpanogas Lake	5	13N	3E	8,250							
11H38P	U	Tony Grove Ranger Station	11	13N	3E	8,250							
11H39P	U	Tony Grove Ranger Station	11	13N	3E	8,250							
11G4P	U	Willow Flat	2	15S	41E	6,100							
RAFT RIVER													
13H2a	U	Clear Creek Meadows	26	14N	14W	9,050							
13H4P5	U	George Peak	4	13N	14W	9,000							
13H1	U	One Mile Summit	17	14N	14W	7,330							
13H3a	U	VPont	17	14N	17W	7,670							
OGDEN RIVER													
11H14M	U	Beaver Creek-Skunk Creek	22	8N	3E	7,150							
11H8PST	U	Ben Lomond Peak	3	7N	1W	8,000							
11H9PST	U	Ben Lomond (lower)	34	7N	1W	5,680							
11H39p	U	Cauley Camp	4	7N	3E	5,500							
11H29	U	Cutler Creek	3	7N	1W	6,780							
11H20	U	Dry Broad Pond	19	8N	4E	8,350							
11H13MPST	U	Dry Broad Pond	19	8N	4E	8,350							
11H46	U	Miller's Peak	16	7N	2E	8,420							
11H47	U	Middle Mountain	16	7N	2E	8,420							
11H48	U	Powder Mountain	6	7N	2E	8,250							
11H49	U	Powder Mountain	6	7N	2E	8,250							
11H48	U	Sagebrush Flat	1	7N	1E	8,400							
11H15P	U	Sagebrush Flat	21	7N	3E	6,300							
WEBER RIVER													
11J24	U	Beaver Creek R.S.	28	2S	7E	7,500							
11J1PST	U	Chalk Creek #1	4	1N	8E	9,100							
11J2MPST	U	Chalk Creek #2	29	2N	8E	8,200							
11J3MP	U	Chalk Creek #3	7	2N	8E	7,500							
11J45a	U	East Shingle Lake	6	2S	8E	9,750							
11J12P	U	Famington Canyon (lower)	15	3N	1E	6,950							
11J11PST	U	Famington Canyon (upper)	23	3N	1E	8,000							
11H44p	U	Francis Canyon	29	2N	6E	7,400							
11J37P	U	Hardcabble	22	5N	2E	6,700							
11H21PST	U	Hone Ridge	25	7N	4E	8,260							
11H31	U	Killbuck Creek	20	6N	5E	7,300							
11H2P	U	Lost Creek	20	6N	5E	7,300							
11J45	U	Lost Creek	20	6N	5E	7,300							
11H3PST	U	Parley's Canyon Summit	5	1S	3E	7,500							
11H30	U	Parley's Canyon	6	5N	4E	8,000							
11H38p	U	Parley's Canyon	22	3N	7E	8,100							
11J5P	U	Redden Mine (lower)	1	2S	6E	8,500							
11J39p	U	Sergeant Lakes	1	2S	6E	9,000							
11J40p	U	Shingle Mill Flat	9	1N	6E	8,300							
11J4PST	U	Smith & Morehouse	22	1S	7E	9,040							
11J4PST	U	Smith & Morehouse	25	1N	7E	7,600							
PROVO RIVER & UTAH LAKE													
11J46PST	U	Beaver Creek Divide	25	2S	7E	8,280							
11J20	U	Camp Albion	29	4S	3E	7,300							
11K21PST	U	Clear Creek Ridge #1	18	11S	6E	9,200							
11K22PST	U	Clear Creek Ridge #2	9	11S	6E	8,000							
11K23P	U	Clear Creek Ridge #3	27	10S	6E	6,600							
11J22P	U	Hutchman R.S.	27	3S	7E	7,360							
11J36P	U	Huber Creek Summit	27	4S	6E	9,000							
11J31	U	Huber Creek Summit	27	4S	6E	9,000							
11K12	U	Packard Canyon	21	7S	5E	6,400							
11K1P	U	Payson R.S.	30	10S	3E	8,050							
11K2	U	Rock Bridge	14	10S	2E	6,750							
UPPER GREEN RIVER IN UTAH (above Duchesne River)													
9J14pP	U	Ashley Twin Lakes	20	1S	19E	10,500							
10J21P	U	Black's Fork G.S.-East Fork	25	2N	12E	9,300							
10J22P	U	Black's Fork Junction	33	3N	12E	8,925							
10J23a	U	Buck Pasture	2	1N	11E	9,700							
9J14P	U	Burnt Creek	4	1N	20E	7,900							
9J13P	U	Grizzly Ridge	8	1S	22E	8,500							
10J26p	U	Henry's Fork	29	2N	14E	10,000							
10J4P	U	Hewitts G.S.	33	3N	13E	9,500							
10J5P	U	Hickerson Park	33	3N	13E	9,500							
9J15p	U	Highline Trail	13	2N	15E	9,100							
10J1	U	Hole-in-the-Rock	13	2N	15E								

Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

U.S. Department of Agriculture
Soil Conservation Service
Forest Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

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Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*